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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,277	10/14/2003	Scott C. Moose	85435THC	7227

7590

01/13/2005

Thomas H. Close
Patent Legal Staff
Eastman Kodak Company
343 State Street
Rochester, NY 14650-2201

EXAMINER

BAREFORD, KATHERINE A

ART UNIT

PAPER NUMBER

1762

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

10/686,277

Applicant(s)

MOOSE, SCOTT C.

Examiner

Katherine A. Bareford

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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DETAILED ACTION

Specification

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

(a) that the pattern of circumferential grooves includes greater than 1.6 grooves per mm (claims 3, 8)

(b) that the grooves have a depth of 90 microns (claims 4, 9)

(c) the width of the relieved surface on the backing roll (claims 5, 10).

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1, 4-6 and 8-10 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for bead coating, does not reasonably provide enablement for other forms of coating. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims.

The only description in the specification as to the prevention of the temperature gradient as claimed is when the coating process is bead coating (claims 2, 7). There is no indication that the process would work with any other forms of coating.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-3, 5-8 and 10 are rejected under 35 U.S.C. 102(a) or (e) as being anticipated by Quiel et al (US 2002/0164431).

As to the 35 USC 102(e) rejection only: The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Claims 1 and 6: Quiel teaches a method and apparatus for coating a liquid composition from an applicator to a surface of a moving web. Figure 1B and paragraph [0034]. The web is conveyed along a path through a coating apparatus. Figure 1B and paragraph [0034]. The coating apparatus includes a coating station for applying a coating to the surface of the web. Figure 1B and paragraph [0034]. The coating station includes a backing roller for supporting the web and a coating hopper for depositing a liquid coating on the web. Figure 1B and paragraph [0034]. The web is wrapped in a partial wrap around the backing roller. Figure 1B and paragraph [0034]. The backing roller is provided with a relieved surface. Paragraph [0040] and figures 4A and 4B. The relieved surface has a pattern of circumferential grooves that provides venting of entrained air. Paragraphs [0040] and [0005] and figure 4A. The pattern of the grooves is such that there can be greater than 2 grooves per mm and the grooves can have a depth of 20 to 80 microns. Figure 4A and paragraph [0040]. This ^{inherently} provides a geometry and depth such that any temperature gradient in the web caused by the grooves in the backing roller does not disturb the coating applied by the coating apparatus. (This is shown because (1) the applied coating lacks non-uniformity (paragraph [0057]) and (2) the greater than 2 grooves per mm (claim 3 of this case) and a range that includes 63 microns (0.0025 in) in depth (page 4 of specification of this case), is the pattern taught by applicant to prevent disturbance). A source of liquid coating composition is provided for coating the web. Figure 1B and paragraph [0034]. The web is transported past the coating station, where the liquid composition is applied to the surface of the web from the coating hopper, whereby the coating of the liquid composition is not disturbed by temperature gradients in the web. Figure 1B and paragraphs [0034], [0040] and [0057].

Claims 2, 7: the coating can be bead coating done from a bead coating apparatus. Figure 1B and paragraph [0034].

Claims 3, 8: the pattern of grooves is greater than 2 grooves per mm. Paragraph [0040].

Claims 5 and 10: the width of the relived surface on the backing roller is equal to or greater than the width of the liquid coating to be applied to the web. Paragraph [0040].

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Quiel et al (US 2002/0164431).

Quiel teaches all the features of these claims, as discussed in the 35 USC 102 rejection above, except for the groove depth of 90 microns.

However, Quiel does teach that it is desirable to have at least 2 grooves per mm on the backing roller and to have groove depth significantly shallower than that of prior art grooves (about 75 to 150 microns). See paragraph [0014]. Quiel also teaches the use of a groove depth of about 20 to 80 microns. See paragraph [0040]. Furthermore, Quiel indicates that as groove

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amount is increased from 1 groove per mmm and depth is decreased from 130 microns the coating becomes more and more uniform. See paragraphs [0058] and [0059] (Table 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Quiel to perform routine experimentation to optimize the depth and amount of the grooves for the specific coating desired, because Quiel indicates that as groove amount is increased (desirably 2 grooves per mm+) and depth is decreased from the conventional depth the coating becomes more and more uniform, and one of ordinary skill in the art would desire to provide the optimum roller for the amount of uniformity needed.

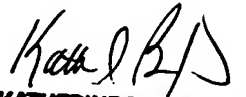
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katherine A. Bareford whose telephone number is (571) 272-1413. The examiner can normally be reached on M-F(6:30-4:00) with the First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive P. Beck can be reached on (571) 272-1415. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and for After Final communications.

Other inquiries can be directed to the Tech Center 1700 telephone number at (571) 272-1700.

Furthermore, information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


KATHERINE BAREFORD
PRIMARY EXAMINER